

# Content Standards Informer

Curriculum and Instruction Unit

December 2009



## In This Issue

### Toyota International Teacher Program

**2010 Toyota International Teacher Program** to Costa Rica is a **fully-funded** professional development program for U.S. educators. The program will take place **June 18 – July 3, 2010**, and the deadline to apply is **January 6, 2010**. Please visit the Web site at [www.toyota4education.com](http://www.toyota4education.com) for application instructions, FAQs, and to apply online. Full-time classroom teachers and librarians of all subjects for grades 6 – 12 are eligible to apply!

### Mathematical Modeling for Montana Green Technology

**Mathematical Modeling for Montana Green Technology** Teams of high school and college mathematics and science teachers from throughout Montana will come to the Montana Learning Center for a workshop, conducted by two specialists, where participating teachers will learn about and experience mathematical modeling related to environmental issues. Participants will then return to their homes and explore environmental issues of regional concern with local companies or organizations. After studying specific local problems, these teachers will reconvene to formulate the regional issues into well-stated, open-ended problems that can be used in the high school classrooms. An electronic copy of this flyer and the application form can be found at [www.montanalearning.org](http://www.montanalearning.org). Note that applications must be from teams of high school and college (one from each level and from either discipline) mathematics and science teachers and the deadline for applications is **December 20, 2009**.

### DOD SMART Scholarships worth \$45 million

Just how generous are the Science, Mathematics & Research for Transformation, SMART Scholarships? Students not only get their full tuition and fees paid, but are given allowances for books and health care. On top of that, they will receive an annual cash stipend ranging from \$25,000 to \$41,000. In exchange for receiving the award, students must agree to work for a DOD laboratory for a specified period of time. Students who are at least 18 years of age, enrolled or planning to be enrolled in a STEM discipline program, and are U.S. citizens are eligible to apply for a SMART Scholarship. Applications must be received by **December 15, 2009**. The SMART Program is administered by a Triangle Coalition member, the American Society for Engineering Education, and the Naval Postgraduate School. For more information, or to apply online, visit [www.asee.org/smart](http://www.asee.org/smart).

### Doing What Works

The [Doing What Works](http://dww.ed.gov/) Web site from the U.S. Department of Education features practical suggestions about ways to support teacher effectiveness, use data to improve instruction, and turn around low-performing schools. For each topic, site visitors will find three kinds of information: essential concepts, recommended practices, and planning templates. Materials include expert interviews, videos, slideshows, diagrams, protocols, sample materials, and more. Materials are organized around real-life scenarios. <http://dww.ed.gov/>

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Gifted and  
General  
Education: Is there  
Consensus on  
High-Quality  
Curriculum?

The standards movement, since the early 1980s has had a profound influence on education. Some question whether it has had a positive effect on the needs of high-ability/high potential learners. In this 2009 article from "Journal for the Education of the Gifted," J. A. Hockett comments on the way in which the standards movement agrees with the research from the field of Gifted Education resulting in high-quality curriculum for all learners. He notes these attributes:

**High-Quality Curriculum Is Authentic:** Experts in general and gifted education agree that curriculum must be authentic: true to the disciplines; guided by the way experts work and think; focused on real problems, processes, and products; personally relevant; and integrated.

**High-Quality Curriculum Is Driven by Meaningful Outcomes:** Both general and gifted education curriculum experts endorse meaningful outcomes for curriculum. They agree that acquiring deep or advanced understanding is one such goal.

**High-Quality Curriculum Is Flexible to Account for Student Differences:** Curriculum should be flexible since students differ from one another in a variety of ways. To uncover student differences, general education and gifted education curriculum experts strongly support using pre-assessment.

**High-Quality Curriculum Is Challenging:** Experts in both fields believe challenge is a vital attribute of high-quality curriculum. Challenge comes through conceptual teaching, a discipline-based focus, approximating experts, abstraction, depth, breadth, complexity, integration, choice, varied pacing, interest-based learning, solving real problems, and product development.

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Save the Date

Integrating Indian Education for All and Content Standards Adobe Connect Presentation will be 3:30 – 4:00 p.m. on January 13. Look for more information and the Web link in the January CSI issue.

Online  
Presentation

Have you taken time to view the Montana Standards Based Education Presentation? It is located on the OPI Web site:  
<http://www.opi.mt.gov/Accred/cstandards.html>

Remind  
Colleagues to Sign  
Up to Receive the  
CSI

The Content Standards Informer (CSI) will be distributed the first Friday of each month through the Content Standards Informer Listserv. If you would like to receive the CSI each month please sign up for the listserv at:  
<http://lists.opi.mt.gov/mailman/listinfo/contentstandardsinformer>

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## Professional Development in Nanoscience and Technology

NanoTeach is recruiting high school physical science teachers for a year-long, nationwide pilot program starting in the summer of 2010. NanoTeach is a National Science Foundation (NSF) funded professional development project that utilizes the ***Designing Effective Science Instruction (DESI)*** framework to integrate **nanoscience and technology content (NS&T)** into *existing* curricula. Through lessons and experiences that model the *DESI* instructional framework, participants will investigate dynamic NS&T content while delving into strategies that support effective science teaching. This project is a collaboration between Mid-continent Research for Education and Learning (McREL), the Stanford Nanofabrication Facility (SNF), the Georgia Institute of Technology, the National Nanotechnology Infrastructure Network (NNIN), and ASPEN Associates. Selected participants will receive a \$3,000 stipend as well as paid travel and lodging to Denver, Colorado for two weeks of professional development. The application deadline is January 8, 2010. For more information or to apply, go to: [www.mcrel.org/NanoTeach/Recruiting](http://www.mcrel.org/NanoTeach/Recruiting).

## Presidential Awards

**The Presidential Awards for Excellence in Mathematics and Science Teaching** is the Nation's highest honor for teachers of mathematics and science. The Awards recognize outstanding K-12 teachers for their contributions in the classroom and to their profession. **NOMINATIONS ARE NOW OPEN.** The 2010 Awards will honor math and science teachers working in **grades K-6**. (Save your enthusiasm for teachers of grades 7 - 12 for the 2011 Awards).

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## Using Standards and Assessment

You are invited to attend the 2010 Math and Science Leadership Conference to be held in Bozeman, Montana, February, 5-6, 2010. The conference will start at 8:15 a.m. and conclude by noon on Saturday, February 6, at the Comfort Inn. Reservations must be made by January 20, 2010. **You can register by going to the MCTM Web site at [www.montanamath.org](http://www.montanamath.org) and clicking on "Click Here to Register for Leadership Conference" or by e-mailing Angel Zickefoose at [zickefoosea@billings.k12.mt.us](mailto:zickefoosea@billings.k12.mt.us). *Registration is first-come, first-served and opened October 1, 2009.***

The topic of this year's conference is *How to Get Every Child Ahead Using Standards & Assessment*. The opening keynote is State Superintendent Denise Juneau. Jean Howard, OPI Mathematics Specialist, Katie Burke, OPI Science Specialist, and Judy Snow, State Assessment Director, will present classroom standards-based instruction incorporating formative assessment.

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School Library  
Media Division  
Listserv

If you are interested in the School Library Media Division (SLMD) Listserv, a low volume and informative list, please e-mail Colet Bartow, [cbartow@mt.gov](mailto:cbartow@mt.gov). Subscription options include a daily digest version to lessen the impact on your inbox.

Twitter

Follow Colet on Twitter (<http://twitter.com/cbartow>) for informative links and resources for school libraries, information literacy and school improvement.

Montana School  
Library Media  
Specialists'  
Facebook

Or join the Montana School Library Media Specialists' Facebook group. <http://www.facebook.com/group.php?gid=45391221569>

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Do the Write Thing  
Challenge Project

Do the Write Thing Challenge is a project presented by the Montana Board of Crime Control. Participating students are asked to make a commitment to not be involved in violence and provide reflective answers to three questions: How has violence affected my life? What are the causes of youth violence? What can I do to reduce youth violence? Seventh and Eighth grade students can express their voice through a poem, play, song, or short essay. The school then forwards the students' work to the Montana Board of Crime Control Juvenile Justice Specialist to be reviewed by a panel of business, community and governmental leaders that oversees and administers the Challenge in Montana. One boy and one girl will be selected to represent Montana at the National Recognition Week in Washington, D.C. in July 2010. Their writings will be published and placed in the Library of Congress.

The deadline for entries is Friday, March 12, 2010. Please look for more information and instructions for entries on the Board of Crime Control Web site: <http://mbcc.mt.gov/JuvenileJustice/DtWT/DtWT.asp>.

Proposed Adoption  
Communication  
Arts Content  
Standards and  
Performance  
Descriptors Public  
Hearing

On December 17, 2009, at 9:00 a.m., the Board of Public Education will hold a public hearing in the conference room of the Office of Public Instruction Building, 1201 11th Avenue, Helena, Montana, to consider the proposed adoption of the Communication Arts Content Standards and Performance Descriptors. You can find a copy of the draft standards on the communication arts Web page located on the Office of Public Instruction Web site: <http://www.opi.mt.gov/CommunicationArts/index.html>.

Have a wonderful holiday!

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